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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,798	01/05/2001	Richard D. Frazer	G00284/US	5281
35758	7590	01/18/2008		
GKN DRIVELINE NORTH AMERICA, INC 3300 UNIVERSITY DRIVE AUBURN HILLS, MI 48326				
			EXAMINER	
			BINDA, GREGORY JOHN	
			ART UNIT	PAPER NUMBER
			3679	
			MAIL DATE	DELIVERY MODE
			01/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/755,798		FRAZER ET AL.	
	Examiner		Art Unit	
	Greg Binda		3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3679

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed December 3, 2007 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 16, 2007 has been entered.

Drawings

3. The replacement drawings filed August 28, 2007 are objected to because the reference numeral 10 appears on page 5 of the specification, but not in the drawings.

Claim Objections

4. Claims 6, 13 & 20 are objected to because in line 2 of each claim the word "range" is misspelled.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At line 4 in each of claims 1, 7 & 15 recites the limitation, "a body portion" but the identity of the element whose portion is a "body portion" is unidentified.

Claim Rejections - 35 USC § 103

7. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cartwright, US 5,695,202 in view of any one of Ayers, US 4,500,151; Rabe, US 6,151,641; and Jedlitschka, US 6,213,805.

a. Claims 1-4. In Figs. 1 & 2, Cartwright shows a transmission joint sealing assembly comprising: an interconnecting shaft 30 including a first circumference 32; and a body portion 80 having a central inner cavity 82 including a second circumference 106 and an inner wall 104, the second circumference defined by the inner wall, the second circumference being smaller than the first circumference of the interconnecting shaft so as to provide an interference fit (see col. 4, line 36), a first end 120 having a mating surface 126, 128, 130 connecting with the transmission joint and a second end 100 disposed opposite the first end. Cartwright discloses in col. 3, lines 1-3 that the body 80 is made from neoprene or other suited material, but does not expressly disclose closed cell silicone material. In col. 3, lines 23 & 24 and col. 4, lines 10-13 Ayers discloses that closed cell silicone foam material is suitable material for a body portion. In col. 2, lines 35-57, Rabe discloses that closed cell silicone foam material is suitable material for a body portion. In col. 2, lines 20-22, Jedlitschka discloses that closed cell foam material is

Art Unit: 3679

suitable material for a neoprene body portion. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the transmission joint sealing assembly of Cartwright by making the body portion from closed cell silicone foam material in order to provide a body portion made from suitable material as taught in any one of Ayers, Rabe and Jedlitschka.

b. Claim 5. In Figs. 1 & 2, Cartwright shows the first end 120 mating surface includes a cage section 128 which is adapted to mate with a cage 66 of the transmission joint and an outer race section 126 which is shaped to mate with an outer race 64 of the transmission joint.

c. Claims 6, 7. The combination of Cartwright and any one of Ayers, Rabe and Jedlitschka comprises all the limitations of the claims but does not expressly include the foam material having a density in the range from 10 kg/m^3 to 27 kg/m^3 and/or being heat resistant to 450°F . However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide foam with a density in the range from 10 kg/m^3 to 27 kg/m^3 and/or being heat resistant to 450°F , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056.

d. Claim 8-11. In addition to that noted in item 'a' above, in Fig. 1, Cartwright shows the second end 100 of the body portion 80 includes at least one chamfer portion 102.

e. Claim 12. See item 'b' above.

Art Unit: 3679

- f. Claims 13 & 14. See item 'c' above.
- g. Claim 15-18. In addition to that noted in item 'a' above, in Fig. 1, Cartwright shows the outer wall of the body portion 80 includes at least one convolute 142.
- h. Claim 19. See item 'b' above.
- i. Claims 20 & 21. See item 'c' above.
- j. Claim 22, See item 'd' above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Delano shows a universal joint comprising an interference fit (col. 5, line 40) between a sealing boot and a shaft.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/
Primary Examiner, Art Unit 3679